

TI-25320

Patent Amendment

*2/Contd
Sub. 61*

forming a conductive structure on said silicon-containing structure; and oxidizing a portion of said insulating layer and said silicon-containing structure while leaving said conductive structure substantially unoxidized by introducing O₂ and H₂ in an explosive reaction to said insulating layer, said silicon-containing structure and said conductive structure, such that the reaction between said O₂ and H₂ does not increase the pressure in the processing chamber beyond a predetermined safe level.

*D3
Sub. 62*

9 (Four Times Amended). A method of oxidizing, in a semiconductor processing chamber, a first feature while leaving a second feature substantially unoxidized, said method comprised of subjecting said first and second features to O₂ and H₂ in an explosive reaction, such that the reaction between said O₂ and H₂ does not increase the pressure in the processing chamber beyond a predetermined safe level.

*D3
Sub. 63*

16 (Four Times Amended). A method of fabricating, in a semiconductor processing chamber, a capacitor having a dielectric between a bottom electrode and a top electrode and situated over a semiconductor substrate, said method comprising the steps of:

- providing said bottom electrode over said semiconductor substrate;
- providing a dielectric material over said bottom electrode; and
- subjecting said bottom electrode and said dielectric material to O₂ and H₂ in an explosive reaction, wherein said dielectric material is oxidized and said bottom electrode remains substantially unoxidized, such that the reaction between said O₂ and H₂ does not increase the pressure in the processing chamber beyond a predetermined safe level.

*D4
Sub. 64*

26 (Thrice Amended). A method of fabricating an electrical device formed in a semiconductor substrate, said method comprising:

- forming an insulating layer over said semiconductor substrate;
- forming a silicon-containing structure on said insulating layer;
- forming a conductive structure on said silicon-containing structure; and

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oxidizing a portion of said insulating layer and said silicon-containing structure while leaving said conductive structure substantially unoxidized by introducing an oxygen-containing gas selected from the group consisting of O₂, N₂O, NO or CO₂ and a separate hydrogen-containing gas to said insulating layer, said silicon-containing structure and said conductive structure, such that an explosive reaction between said the hydrogen-containing gas and the oxygen containing gas does not increase the pressure in the processing chamber beyond a predetermined safe level.
